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                CA/CAplus enhanced with 1900-1906 U.S. patent records
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        MAY 19 Derwent World Patents Index to be reloaded and enhanced
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        MAY 30
                IPC 8 Rolled-up Core codes added to CA/CAplus and
                USPATFULL/USPAT2
NEWS 9
        MAY 30
                The F-Term thesaurus is now available in CA/CAplus
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        JUN 02
                The first reclassification of IPC codes now complete in
                INPADOC
                TULSA/TULSA2 reloaded and enhanced with new search and
NEWS 11
        JUN 26
                and display fields
NEWS 12
        JUN 28
                Price changes in full-text patent databases EPFULL and PCTFULL
NEWS 13
        JUl 11 CHEMSAFE reloaded and enhanced
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        JUl 19
                Coverage of Research Disclosure reinstated in DWPI
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NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

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=> => file reg COST IN U.S. DOLLARS

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L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

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=> s l1
SAMPLE SEARCH INITIATED 11:27:23 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 169 TO ITERATE

100.0% PROCESSED 169 ITERATIONS 1 ANSWERS SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

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PROJECTED ITERATIONS: 2601 TO 4159

PROJECTED ANSWERS: 1 TO 80

=> search full 11 ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:sss FULL SEARCH INITIATED 11:27:52 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 3210 TO ITERATE

100.0% PROCESSED 3210 ITERATIONS SEARCH TIME: 00.00.01

2 ANSWERS

L3 2 SEA SSS FUL L1

=> d 13 scan

L3 2 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN IN Octanediamide, N-hydroxy-N'-(phenyl-4-t)- (9CI) MF C14 H19 N2 O3 T

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 2 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN IN Octanediamide, N-hydroxy-N'-phenyl- (9CI) MF C14 H20 N2 O3

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SINCE FILE TOTAL ENTRY SESSION 167.82 168.03

FULL ESTIMATED COST

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=> s 13

L4 258 L3

=> s 13 and polymorph?

258 L3

191933 POLYMORPH?

L5 4 L3 AND POLYMORPH?

=> s 14 and x-ray 1531251 X 1033733 RAY 797654 X-RAY

(X(W)RAY)

L6 5 L4 AND X-RAY

=> s 14 and DSC 57514 DSC

L7 0 L4 AND DSC

L8 8 L4 AND DIFFERENTIAL

=> s 14 and methanol 196715 METHANOL

L9 2 L4 AND METHANOL

=> s l4 and ethanol 253287 ETHANOL

L10 2 L4 AND ETHANOL

=> s l4 and ?crystalliz? 208204 ?CRYSTALLIZ?

L11 0 L4 AND ?CRYSTALLIZ?

=> s l4 and crystal 1242517 CRYSTAL

L12 8 L4 AND CRYSTAL

=> s l4 and saha 1301 SAHA

L13 173 L4 AND SAHA

=> s l4 and tablet

44161 TABLET

L14 1 L4 AND TABLET

=> s l4 and gelatin 68264 GELATIN

L15 1 L4 AND GELATIN

=> s l4 and capsule 37606 CAPSULE

L16 0 L4 AND CAPSULE

=> s saha

L17 1301 SAHA

=> s 118 not py > 2003 3149511 PY > 2003 L24 5 L18 NOT PY > 2003

=> d 124 ibib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 5 ANSWERS - CONTINUE? Y/(N):Y

L24 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:819069 CAPLUS

DOCUMENT NUMBER: 140:174966

TITLE: Differential regulation of the Sir2 histone

deacetylase gene family by inhibitors of class I and

II histone deacetylases

AUTHOR (S): Kyrylenko, S.; Kyrylenko, O.; Suuronen, T.; Salminen,

CORPORATE SOURCE: Department of Neuroscience and Neurology, University

of Kuopio, Kuopio, 70211, Finland

SOURCE: Cellular and Molecular Life Sciences (2003), 60(9),

1990-1997

CODEN: CMLSFI; ISSN: 1420-682X

PUBLISHER: Birkhaeuser Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

AB The Sir2 histone deacetylase gene family consists of seven mammalian sirtuins (SIRTs) which are NAD-dependent histone/protein deacetylases. Sir2 proteins regulate, for instance, genome stability by chromatin silencing in yeast. In mammals, their function is still largely unknown. Due to the NAD+ dependency, Sir2 might be the link between metabolic activity and histone/protein acetylation. Regulation of gene expression also seems to play an important role in Sir2 functions, since increasing the dosage of Sir2 genes increases genome stability in yeast and Caenorhabditis elegans. We observed that the modification of histone/protein acetylation status by several class I and II histone deacetylase (HDAC) inhibitors induces differential changes in gene expression profiles of seven SIRT mRNAs in cultured neuronal cells. SIRT2, SIRT4 and SIRT7 were upregulated, whereas SIRT1, SIRT5 and SIRT6 were downregulated by trichostatin A (TSA) and n-butyrate. The upregulation of SIRT mRNAs was inhibited by actinomycin D. Interestingly, the regulation of SIRT mRNAs was highly similar both in mouse Neuro-2a neuroblastoma cells and post-mitotic rat primary hippocampal and cerebellar granule neurons. Using a chromatin immunopptn. technique, we showed that the upregulation of SIRT2 expression with TSA is related to the hyperacetylation of DNA-bound histone H4 within the first 500 bp upstream of the transcription start site of the SIRT2 gene. Chemical different types of HDAC inhibitors, such as TSA, apicidin, SAHA, M344 and n-butyrate induced remarkably similar responses in SIRT1-7 mRNA expression patterns. Differential responses in SIRT mRNA expression profiles indicate that the expression of the Sir2 family of genes is selectively regulated and dependent on histone/protein acetylation status. 149647-78-9, SAHA

IT

RL: PAC (Pharmacological activity); BIOL (Biological study) (differential regulation of Sir2 histone deacetylase gene family by inhibitors of class I and II histone deacetylases)

149647-78-9 CAPLUS RN

CN Octanediamide, N-hydroxy-N'-phenyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:243259 CAPLUS

DOCUMENT NUMBER: 139:111230

AUTHOR (S):

TITLE: Susceptibility of multidrug resistance tumor cells to

apoptosis induction by histone deacetylase inhibitors Castro-Galache, Maria D.; Ferragut, Jose A.; Barbera, Victor M.; Martin-Orozco, Elena; Gonzalez-Ros, Jose

M.; Garcia-Morales, Pilar; Saceda, Miguel

CORPORATE SOURCE: Centro de Biologia Molecular y Celular, Universidad

Miguel Hernandez, Elche, 03202, Spain

SOURCE: International Journal of Cancer (2003), 104(5),

579-586

CODEN: IJCNAW; ISSN: 0020-7136

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The main goal of our study has been to analyze the efficiency of new anticancer drugs, specifically histone deacetylase inhibitors, in tumor cells bearing a multidrug resistance phenotype. We report that the histone deacetylase inhibitors, Trichostatin A and Suberoylanilide Hydroxamic Acid (SAHA), dramatically reduce cell viability and promote apoptosis in different drug-resistant cells, affecting in a much lesser extent to their parental drug-sensitive counterparts. The

extent to their parental drug-resistant certs, affecting in a much le extent to their parental drug-sensitive counterparts. The differential effects induced by Trichostatin A and SAHA between drug-sensitive and drug-resistant cells are reflected on the main characteristics of the resistant phenotype. Thus, reverse transcription-PCR and Western immunoblots confirm that both histone deacetylase inhibitors promote endogenous down-regulation of

P-glycoprotein, which is overexpressed in the drug-resistant cells. Transfection of drug-sensitive cells with the P-glycoprotein cDNA ruled out the a priori possible association between apoptosis and down-regulation of P-glycoprotein induced by the histone deacetylase inhibitors. The results suggest a therapeutic potential of histone deacetylase inhibitors in the treatment of cancers with acquired resistance.

IT 149647-78-9, Suberoylanilide Hydroxamic Acid

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(susceptibility of multidrug resistance tumor cells to apoptosis induction by histone deacetylase inhibitors)

RN 149647-78-9 CAPLUS

CN Octanediamide, N-hydroxy-N'-phenyl- (9CI) (CA INDEX NAME)

O O | | | | | PhNH-C-(CH₂)6-C-NH-OH

AUTHOR (S):

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:381216 CAPLUS

DOCUMENT NUMBER: 135:131735

TITLE: 3-(4-Aroyl-1H-pyrrol-2-yl)-N-hydroxy-2-propenamides, a

new class of synthetic histone deacetylase inhibitors Massa, Silvio; Mai, Antonello; Sbardella, Gianluca; Esposito, Monica; Ragno, Rino; Loidl, Peter; Brosch,

Gerald

CORPORATE SOURCE: Dipartimento Farmaco Chimico Tecnologico, Universita

degli Studi di Siena, Siena, 53100, Italy

SOURCE: Journal of Medicinal Chemistry (2001), 44(13),

2069-2072

CODEN: JMCMAR; ISSN: 0022-2623

American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:131735

Novel 3-(4-aroyl-2-pyrrolyl)-N-hydroxy-2-propenamides are disclosed as a new class of histone deacetylase (HDAC) inhibitors. Three-dimensional structure-based drug design and conformational analyses into the histone deacetylase-like protein (HDLP) catalytic core suggested the synthesis and biol. evaluation of compds. 7a-h. Exptl. pKi values are in good agreement with VALIDATE predicted pKi values of new derivs. All compds. 7a-h show HDAC inhibitory activity in the micromolar range, with 7e as the most potent derivative (IC50 = 1.9 μ M). The influence of the 4'-substituent in the aroyl moiety is not significant for the inhibitory activity, as all compds. 7a-g show IC50 values between 1.9 and 3.9 μM . Otherwise, the unsatd. chain linking the pyrrole ring to the hydroxamic acid group is clearly important for the anti-HDAC activity, the saturated analog 7h being 10-fold less active than the unsatd. counterpart 7a.

IT 149647-78-9

PUBLISHER:

RL: BSU (Biological study, unclassified); BIOL (Biological study) (structure-based drug design of synthetic histone deacetylase inhibitors)

RN149647-78-9 CAPLUS

CNOctanediamide, N-hydroxy-N'-phenyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:185791 CAPLUS

DOCUMENT NUMBER:

134:204354

TITLE:

Crystal structure of a histone

deacetylase-like protein from Aquifex aeolicus and

complexes with inhibitors

INVENTOR (S):

Pavletich, Nikola; Finnin, Michael; Donigian, Jill; Richon, Victoria; Rifkind, Richard A.; Marks, Paul A.;

Breslow, Ronald

PATENT ASSIGNEE(S): Sloan-Kettering Institute for Cancer Research, USA;

Trustees of Columbia University in the City of New

York

SOURCE: PCT Int. Appl., 329 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2001018045 WO 2001018045	A1 20010315 C2 20021107	WO 2000-US24700	20000908
W: CA, JP, US RW: AT, BE, CH, PT, SE	CY, DE, DK, ES,	FI, FR, GB, GR, IE, IT,	LU, MC, NL,
CA 2383885 EP 1212357 R: AT, BE, CH, IE, FI, CY	AA 20010315 A1 20020612 DE, DK, ES, FR,	CA 2000-2383885 EP 2000-968344 GB, GR, IT, LI, LU, NL,	20000908 20000908 SE, MC, PT,

JP 2003518923 T2 20030617 JP 2001-522267 20000908 US 2003013176 A1 20030116 US 2002-95109 20020308 PRIORITY APPLN. INFO.: US 1999-152753P P 19990908 WO 2000-US24700 W 20000908

The present invention provides three-dimensional structural information of AB the histone deacetylase-like protein (HDLP) from the hyperthermophilic bacterium Aquifex aeolicus. HDLP shares 35.2% amino acid sequence identity with human histone deacetylase (HDAC1). The double mutant C75S/C77S of HDLP is used to facilitate the determination of three-dimensional structure of HDLP bound to a zinc atom at its zinc atom-binding site. present invention further provides three-dimensional structural information of HDLP double mutant bound by inhibitor mols. (e.g., trichostatin A or suberoyl anilide hydroxamic acid). The three-dimensional structural information of the present invention is useful to design, isolate and screen deacetylase inhibitor compds. capable of inhibiting HDLP, HDAC family members, and HDLP-related mols. The invention also relates to nucleic acids encoding a mutant HDLP which facilitates the determination of the three-dimensional structure of HDLP in the presence of a zinc atom.

IT 149647-78-9D, complex with deacetylase protein RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(crystal structure of a histone deacetylase-like protein from Aquifex aeolicus and complexes with inhibitors)

RN149647-78-9 CAPLUS

Octanediamide, N-hydroxy-N'-phenyl- (9CI) (CA INDEX NAME) CN

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 5 OF 5 CAPLUS , COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:596349 CAPLUS

DOCUMENT NUMBER:

131:334011

TITLE:

Structures of a histone deacetylase homologue bound to

the TSA and SAHA inhibitors

AUTHOR (S):

Finnin, Michael S.; Donigian, Jill R.; Cohen, Alona; Richon, Victoria M.; Rifkind, Richard A.; Marks, Paul A.; Breslow, Ronald; Pavletich, Nikola P.

CORPORATE SOURCE:

Cellular Biochemistry and Biophsyics Program and Howard Hughes Medical Institute, Cell Biology Program,

Memorial Sloan-Kettering Cancer Center, New York, NY,

10021, USA

SOURCE:

Nature (London) (1999), 401(6749), 188-193

CODEN: NATUAS; ISSN: 0028-0836

PUBLISHER:

Macmillan Magazines

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Histone deacetylases (HDACs) mediate changes in nucleosome conformation and are important in the regulation of gene expression. HDACs are involved in cell-cycle progression and differentiation, and their deregulation is associated with several cancers. HDAC inhibitors, such as trichostatin A (TSA) and suberoylanilide hydroxamic acid (SAHA), have anti-tumor effects, as they can inhibit cell growth, induce terminal differentiation and prevent the formation of tumors in mice models, and they are effective in the treatment of promyelocytic leukemia. Here we describe the structure of the histone deacetylase catalytic core, as revealed by the crystal structure of a homolog from the hyperthermophilic bacterium Aquifex aeolicus, that shares 35.2% identity

with human HDAC1 over 375 residues, deacetylates histones in vitro and is inhibited by TSA and SAHA. The deacetylase, deacetylase-TSA and deacetylase-SAHA structures reveal an active site consisting of a tubular pocket, a zinc-binding site and two Asp-His charge-relay systems, and establish the mechanism of HDAC inhibition. The residues that make up the active site and contact the inhibitors are conserved across the HDAC family. These structures also suggest a mechanism for the deacetylation reaction and provide a framework for the further development of HDAC inhibitors as antitumor agents.

IT 149647-78-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (crystal structures of histone deacetylase homolog bound to trichostatin A and suberoylanilide hydroxamic acid)

RN 149647-78-9 CAPLUS

CN Octanediamide, N-hydroxy-N'-phenyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT